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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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03/29/2001

Sandip Sarkar

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09/14/2006

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EXAMINER

LY, ANH VU H

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/823,015

Applicant(s)

SARKAR ET AL.

Examiner

Anh-Vu H. Ly

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is in response to applicant's amendment filed July 7, 2006. Claims 1-13 are currently pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Razoumov et al (US Patent No. 6,771,700 B1).

With respect to claim 1, Razoumov discloses a transmitter apparatus (Fig. 1) comprising:

a processor operative to control transmission and retransmission of data (Fig. 3, processor 308); and

a memory storage device operable for storing a plurality of computer-readable instructions (Fig. 1 illustrates a wireless communication system, represented by a base station 102 and remote station 104, communicating over forward link 106 and reverse link 108. Herein, the base station 102 and the remote station 104 must include memory for storing instructions to be implemented in controlling data communications), comprising:

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a first set of instructions for receiving a transmission frame error rate and a retransmission frame error rate from a receiver (col. 4, lines 30-40 and col. 7, formula 22, the receiving station reports first FER1 and second FER2 to the transmitting station for calculating transmitted energies, E1, E2, E3, etc...);

a second set of instructions for determining a transmission energy setpoint as a function of the transmission frame error rate (col. 4, lines 30-40, the transmitting station transmits information, contained in frames, with a first energy E1; herein, E1 achieves FER1) and the transmission quality (col. 7, lines 16-20, transmitting station adaptively evaluates feedback information received from the receiving station, e.g., attenuation, fading, number of multi-paths, velocity, and data rate); wherein the determination of the transmission energy setpoint is responsive to an update trigger (col. 3, lines 38-52, the transmitting station adaptively evaluates feedback information from the receiving station. The transmitting station then uses a look-up table to select proper transmission and retransmission energies. Herein, the feedback information is the update trigger; the transmitting station adjusts the transmitted energy once it receives the feedback information); and

a third set of instructions for determining a retransmission energy setpoint as a function of the retransmission frame error rate (col. 7, formula 22, herein E3 is calculated as a function of received FER2) and the retransmission quality (col. 7, lines 16-20, transmitting station adaptively evaluates feedback information received from the receiving station, e.g., attenuation, fading, number of multi-paths, velocity, and data rate), wherein the determination of the transmission energy setpoint is responsive to the update trigger (col. 3, lines 38-52, the transmitting station adaptively evaluates feedback information from the receiving station. The

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transmitting station then uses a look-up table to select proper transmission and retransmission energies. Herein, the feedback information is the update trigger; the transmitting station adjusts the transmitted energy once it receives the feedback information).

With respect to claim 2, Razoumov discloses that wherein the transmission quality is measured by a received error indication signal (col. 3, lines 62-63, the transmitting station is alerted to the occurrence of frame errors at the receiving station).

With respect to claim 3, Razoumov discloses that wherein the transmission energy setpoint and retransmission energy setpoint are determined as traffic to pilot ratios (col. 4, formula 1. Herein, the total transmission energy is a function of traffic to pilot ratio).

With respect to claim 4, Razoumov discloses that wherein the third set of instructions determines retransmission energy setpoint as function of retransmission frame error rate, retransmission quality, and the transmission energy setpoint (col. 7, formula 22 and col. 7, lines 16-20, herein, energy E3 relates to FER2, E1, and channel conditions occur during transmission and retransmissions).

With respect to claim 5, Razoumov disclose that wherein the third set of instructions determines the retransmission energy setpoint by adding a delta value to the transmission energy setpoint (col. 7, formula 22, E3 will equal to a number added to E1 for a fixed E and fixed FER1 and FER2 and E2).

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With respect to claim 6, Razoumov discloses a method comprising:

determining a transmission energy setpoint to achieve a transmission frame error rate (col. 4, lines 30-40, the transmitting station transmits information, contained in frames, with a first energy E1 to achieve FER1);

adjusting the transmission energy setpoint on occurrence of a transmission error (col. 4, lines 30-40, the transmitting station selects a second transmission energy E2 and retransmits the frames received in error), wherein the transmission error is received from a receiver (col. 3, lines 62-63, the transmitting station is alerted to the occurrence of frame errors at the receiving station);

determining a retransmission energy setpoint to achieve a retransmission frame error rate (col. 4, lines 30-40, the transmitting station selects a second transmission energy E2 and retransmits the frames received in error, with a second energy to achieve FER2); and

adjusting the retransmission energy setpoint on occurrence of a retransmission error (col. 7, formula 22 relates to adjusting transmitted energy more than one transmission and retransmission), wherein the retransmission error is received from the receiver (col. 3, lines 62-63, the transmitting station is alerted to the occurrence of frame errors at the receiving station).

With respect to claim 7, Razoumov discloses that adjusting the retransmission energy setpoint as a function of transmission energy setpoint (col. 7, formula 22, herein, energy setpoints E1, E2, E3, etc... are adjusted based on total energy and previous transmitted energy).

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With respect to claim 8, Razoumov discloses that adjusting the retransmission energy setpoint to achieve a desired frame error rate for retransmission (col. 7, formula 22).

With respect to claim 9, Razoumov discloses that adjusting the transmission energy setpoint to achieve a desired frame error rate for transmission (col. 6, formula 21).

With respect to claim 10, Razoumov discloses that wherein the transmission frame error rate is greater than the retransmission frame error rate (col. 6, formula 21, herein, according to the formula, $f(E1)$ is always greater than $f(E2)$ for some numbers).

With respect to claim 11, Razoumov discloses that wherein the transmission frame error rate and retransmission frame error rate result in a desired total frame error rate (col. 4, formula 2).

With respect to claim 12, Razoumov discloses that wherein transmission frame error rate and retransmission frame error rate are predetermined values (col. 4, formula 2).

With respect to claim 13, Razoumov discloses that wherein transmission frame error rate and retransmission frame error rate are dynamic values (col. 4, formula 2).

Response to Arguments

3. Applicant's arguments filed July 7, 2006 have been fully considered but they are not persuasive.

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Applicant argues in pages 6 and 7 that Razoumov does not teach a determination or update of E1 and E2 responsive to an update trigger. Examiner respectfully disagrees. Razoumov discloses (col. 3, lines 38-52) that the transmitting station adaptively evaluates feedback information from the receiving station. The transmitting station then uses a look-up table to select proper transmission and retransmission energies (Herein, the feedback information is the update trigger).

Applicant further argues in page 7 that Razoumov does not teach an adjustment or update of E1 and E2 responsive to an error as in Applicant's claims. Examiner respectfully disagrees. As clearly disclosed in col. 3, lines 38-52, the transmitting station adjusts the transmission and retransmission energies according to the feedback information. Herein, the feedback information contains the frame error rate, which is a function of energy.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

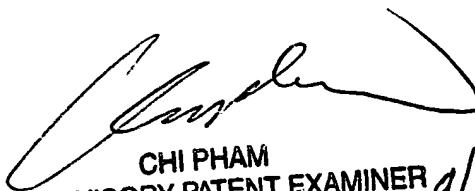
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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

avl


CHI PHAM
SUPERVISORY PATENT EXAMINER 9/2/00